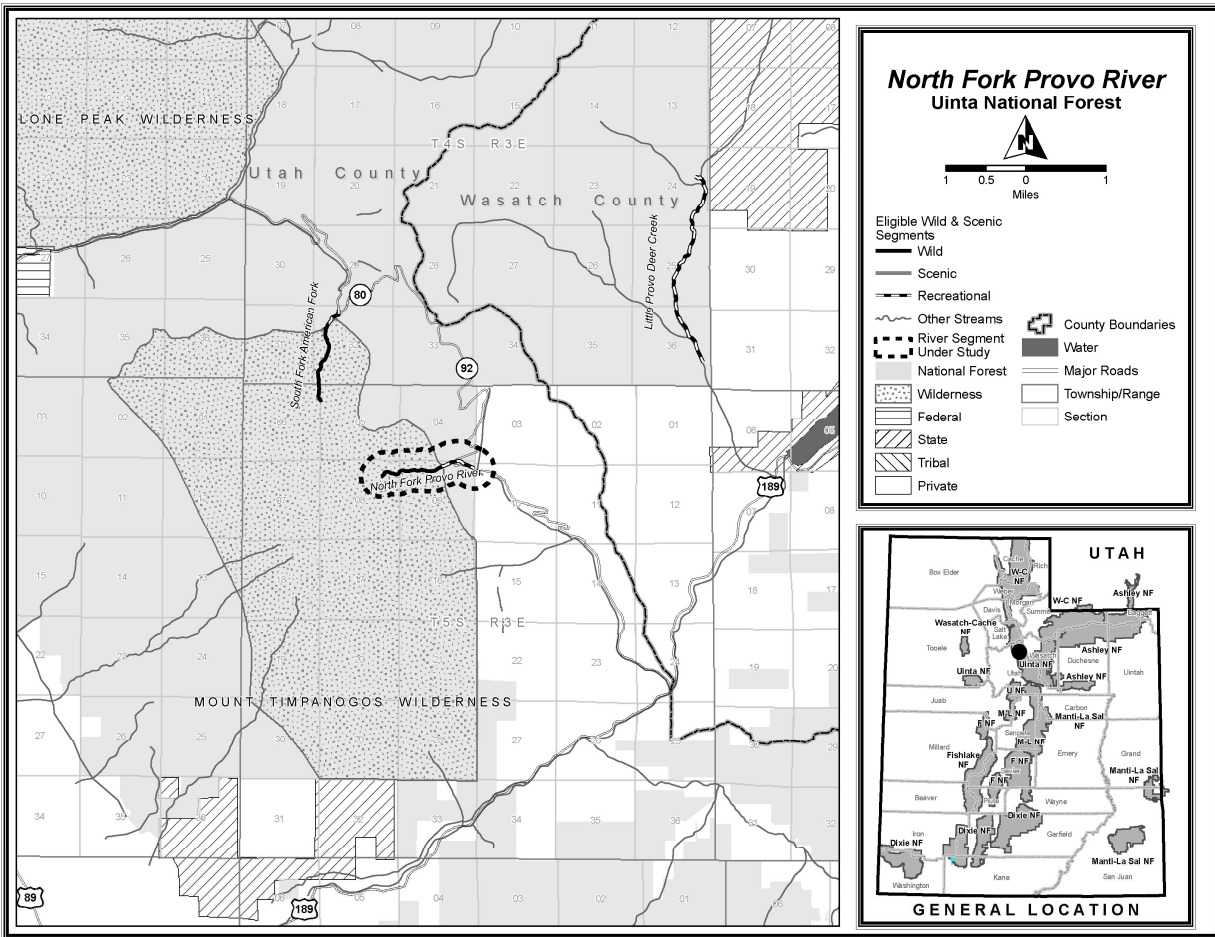


North Fork Provo River Suitability Evaluation Report (SER)



STUDY AREA SUMMARY

Name of River: North Fork Provo River

River Mileage:

Studied: 1.3 miles from the confluence near the National Forest boundary and Mt. Timpanogos Campground to the headwater spring in Section 8.

Eligible: Same

Location:

North Fork Provo River	Uinta-Wasatch-Cache National Forest, Pleasant Grove Ranger District, Utah County, Utah		Congressional District 3	
	Start – Legal Description	End - Legal Description	Classification	Miles
Segment 1	NE ¼ NE ¼, Sect. 8, T5S, R3E	NW ¼ NE ¼, Sect. 9, T5S, R3E	Wild	0.9
Segment 2	NW ¼ NE ¼, Sect. 9, T5S, R3E	NW ¼ NW ¼, Sect. 10, T5S, R3E	Recreational	0.4

Segment 1 - Confluence with another North Fork tributary just above the National Forest Boundary and just below Mount Timpanogos Campground, to the Mt. Timpanogos Wilderness boundary, as a recreational river (0.4 miles)

Segment 2 - From Mt. Timpanogos Wilderness boundary to headwater spring in Section 8, as

a wild river (0.9 miles)

Physical Description of River Segment: North Fork Provo River is a small high mountain stream originating from a series of springs located in glacial cirques high on Mt. Timpanogos. The stream descends through a series of glacial cirques, down steep exposed glacial headwall cliffs, into a glacially carved valley below. Upper reaches of the stream are extremely steep with several waterfalls. Exposed rock strata and steep cliffs common in the area. Elevations range from about 8,160 feet at the headwaters in Section 8 to about 6,870 feet at the lower end of the segment in Section 10. The stream's course, particularly in the upper half of the segment, is steep; dropping 1,290 feet over the 1.3 mile segment length. The lower portion (about half) of the river traverses through a glacial valley and is not as steep. At high flows the entire length of the study segment flows water. However, when flows are lower the stream disappears into the coarse cobble and gravel glacial, colluvial, and alluvial materials in the valley floor. The point at which this occurs varies depending upon the stream flow, ranging from just above the Wilderness boundary to a few hundred yards further upstream. The valley floor is subject to avalanches and debris flows which periodically modify the stream channel here. The river forks into multiple channels as it traverses through the valley bottom. Two primary channels exist: one following the northern side of the valley bottom and the other the following the southern side of the valley. The southern channel, currently only flows when water is collected from the adjacent slopes (to the south) and during very high runoff periods. The southern channel and associated side-channels are crossed by the Stewart-Cascade Trail (#056) via fords and rock and log culverts, a trail accessing Theater-in-the-Pines Picnic Site (bridges and a culvert), and the Theater-in-the-Pines Amphitheater (culvert) and group site. The southern channel leaves National Forest System (NFS) lands just below the Theater-in-the-Pines Group Site parking area. The northern channel (which is identified as the river for this study) is currently the primary North Fork channel. This channel is crossed by the Aspen Grove (Mt. Timpanogos) Trail (#052) via a bridge and culvert (on a side channel), State Route 92 (culvert), and Mount Timpanogos Campground Road (#70140). This channel joins another North Fork tributary on NFS lands just below Mount Timpanogos Campground and just above the Forest Service/private property boundary.

ELIGIBILITY

This segment of North Fork Provo River is eligible for the National Wild and Scenic Rivers System as it is free-flowing and has outstandingly remarkable scenic value. The portion of segment within Mt. Timpanogos Wilderness is eligible as a wild river, while the portion below the Wilderness boundary is eligible as a recreational river.

Name and Date of Eligibility Document: *Final Inventory of Rivers on the Uinta National Forest Eligible for Inclusion in the National Wild and Scenic Rivers System, January 1998.*

Determination of Free-flow: The North Fork Provo River is free of major channel modification, and is free of major structures, and thus is free-flowing. This portion of the North Fork Provo River is mostly unaltered from a hydrological perspective. Debris from a 2004 avalanche clogged the northern valley bottom channel and destroyed a trail bridge. The few yards of channel affected were recently cleared. As described above, the lower reaches of the river segment are intermittent due to coarse channel substrate and streamflows are generated only during snowmelt and high intensity storm events. Some springs in the corridor have been developed and diverted, but there are no water diversions from the channel. The trails in the corridor do not impinge on or affect the stream's hydrologic character.

Determination of Outstandingly Remarkable Values:

Scenic Value – The stream and features in the entire viewshed contribute significantly to the overall scenic quality of the segment. The stream is steep, traversing from its alpine headwaters on Mt. Timpanogos through the forest below. There is a wide variety of vegetation in the corridor and along the stream including alpine grasses, forbs and wildflowers in the upper reaches; to riparian cottonwood,

oak/maple, Douglas-fir, spruce-fir, and aspen forests with diverse grass, forb and wildflower understories at the lower reaches. Similar vegetation communities and diversity can be found both within the corridor and on other mountain slopes adjoining the corridor and in the vicinity. In the fall, this diversity of vegetation communities is especially attractive with its mosaic of yellow, orange, red, browns and greens. This fall color attracts thousands of viewers to the Aspen Grove (Mt. Timpanogos) National Recreation Trail and American Fork Scenic Backway which cross through the corridor. Mt. Timpanogos is also widely known for its wild flowers. Each summer thousands of visitors traverse the Mt. Timpanogos National Recreation Trail to view wildflowers in the meadows and on the slopes in, adjacent to, and above the corridor. Lower reaches of the stream are intermittent, but the intermittent water still supports mesic plants such as cottonwood, willow, grasses, forbes and wildflowers which contribute to the scenic diversity. The upper half or so of the segment is perennial and is characterized by steep cascading runs and several short waterfalls. These are visible in several places from the stream and trail below. The Mt. Timpanogos National Recreation Trail passes under or next to some of these, which contributes greatly to the aesthetic and recreational appeal. The stream plunges from the heights of Mt. Timpanogos through a glacial cirque and into the glacial valley below. The exposed geologic strata and steep cliffs along the stream, in the corridor, and on nearby mountain slopes contribute to the scenic diversity and quality of the scenery. The summit of Mt. Timpanogos, located outside the corridor, provides a not too distant majestic scenic focal point for viewers located along the stream and trail. This combination of features and access are unusual in northern Utah. The eligibility inventory rated this segment as scenic, regionally significant, with a high value in diversity of view, high value in special features and high value in seasonal variation. Cultural modification is highly appropriate.

CLASSIFICATION

Basis for the Classification of River Segment: Segment 1—Recreational; Segment 2—Wild

The portion of the stream within the Mt. Timpanogos Wilderness is eligible as a wild river, fully meeting the wild criteria. The portion below the wilderness boundary is eligible as a recreational river as it is readily accessible by road.

SUITABILITY REPORT

Landownership and Land Uses – The corridor for the 1.3 mile-long river segment encompasses about 461 acres, and all of this is on National Forest System (NFS) lands administered by the Uinta-Wasatch-Cache National Forest. Privately-owned property directly adjoins the river segment to the east, but no private lands occur within the corridor. The *2003 Uinta National Forest Land and Resource Management Plan* (Uinta Forest Plan) made the following land allocations for this area:

Uinta Forest Plan Management Allocations				
Management Area	Overlying Management Prescription Allocation		Underlying Management Prescription Allocation	
Lower Provo	2.1 – Wild and Scenic Rivers – Wild	317 acres	1.4 - Wilderness	317 acres
	2.3 – Wild and Scenic Rivers – Recreation	144 acres	3.1 - Aquatic, Terrestrial and Aquatic Resource Emphasis	84 acres
			4.4 - Dispersed Recreation Emphasis	40 acres
			4.5 - Dispersed Recreation Emphasis	20 acres

The entire North Fork Provo River corridor lies in Utah County, Utah, and all of it lies within the

“Mountain Resort and Recreation Zone” identified in the 1997 Utah County General Plan. The intent and purpose of this zone includes carefully utilizing the resources of the watershed, wildlife, soils, vegetation, and scenic beauty while considering the delicate nature of the land; preserving the aesthetic appearance of the landscape; and protect water influence areas, flood plains, vital big game winter range, ground water recharge areas, and other sensitive lands from incompatible development.

Mineral and Energy Resource Activities – There are no existing salable, locatable, or leasable mineral and energy resources development occurring in the corridor or adjacent area. This area is considered to have low potential for oil and gas resources. At this time, no lands within the corridor have been identified as available and suitable for leasing. The wild segment within the wilderness would not be open to leasing. An oil and gas leasing analysis is underway (decision anticipated winter 2008-2009), and this would determine the availability and suitability of the recreation segment for leasing. Due to the retention visual quality objective, Alpine Loop Scenic Backway, Mount Timpanogos Campground and Theater-in-the-Pine Site the proposed action for this leasing analysis the recreation segment would make this segment available for leasing with No Surface Occupancy and Controlled Surface Use stipulations.

Water Resources Development – This portion of the North Fork Provo River has little alteration from a hydrological perspective. There are no historic, current, or known planned Federal Energy Regulatory Commission permits or license applications for this corridor. Downstream from this segment, the BOR has withdrawn lands to support its Provo River /CUP project, Bonneville Unit. Designation into the National Wild and Scenic River System does not affect existing, valid water rights.

Transportation, Facilities, and Other Developments – Three trails, one State highway, the Timpanogos Emergency Response Team (TERT) shed, and several Forest campground roads are within the corridor. The Aspen Grove (Mt. Timpanogos) Trail, #052, is a very popular non-motorized trail accessing Mt. Timpanogos from Mt. Timpanogos Campground and a large paved trailhead (with restrooms). The lower reaches of this trail are paved. About 0.3 miles of this trail below the Wilderness boundary, and 1.6 miles above the wilderness boundary lie within the river corridor. This trail crosses the stream via a culvert and wooden bridge, and in one place goes under a waterfall. The Lame Horse Trail (#055), a section of the Great Western Trail, is open to motorcycles and extends from the Aspen Grove Trail north out of the corridor. The Stewart-Cascade Trail, #056, is a non-motorized trail running from Aspen Grove parking lot out of the corridor to the south and east.

About 0.6 miles of Utah State Highway 92 crosses through the east end of the corridor. This very popular paved National Scenic Backway is well-known for its spectacular scenery, particularly in the fall. The Backway runs from Provo Canyon to and thru American Fork Canyon. Sundance Ski Area, BYU’s Aspen Grove facility, and the North Fork Provo community are located on private land just to the east and south of the corridor. Theater-in-the-Pines, a CCC-constructed amphitheater/Group Site, is eligible for the National Register of Historic Places.

The Aspen Grove (Mt. Timpanogos) National Recreation Trail (#052) crosses the stream in places; in one location via a bridge. This trail bridge was crushed by a 2004 avalanche in the drainage and rocks and gravel collected behind the bridge. This section of trail and bridge have been relocated. The Stewart-Cascade Trail (#056) crosses the secondary southern stream channel with rock and log culverts and fords, and does not affect the stream’s hydrologic character.

Two water developments exist within the corridor. A pipeline extends from 3 springs in a headwater tributary down-valley for domestic and irrigation use in the Mt. Timpanogos Campground and the North Fork Community. The pipeline is located beneath the old Mt. Timpanogos Trail alignment and includes a partially buried valve-box adjacent to the trail, approximately 0.25 miles above the trailhead. This valve-box separates US Forest Service and North Fork Special Service District water. Pipelines extend down-canyon from here to their points of use in and below the corridor. The North Fork Service District’s water

is routed to their treatment plant near the Aspen Grove facility below the Forest Boundary. The Forest Service portion is stored in a 10,000-gallon underground storage tank located a few feet north of the Aspen Grove Trail and just within the Mt. Timpanogos Wilderness. The storage tank is scheduled to receive heavy maintenance, or to be relocated and replaced.

Grazing Activities – None of the corridor is within an open grazing allotment and no lands within the corridor are considered suitable for domestic livestock grazing.

Recreation Activities – Mt. Timpanogos Trail (#052) runs along the river corridor. The stream segment is not the primary draw of the area for hikers; rather it is the wilderness setting and scenic hiking experiences that pull in most users. An estimated 13,000 visitors use this corridor each year to access the Mt. Timpanogos Wilderness, and portions of the corridor are accessible year-round. The area has an unusually high percent of visitors from outside the region due to the proximity of Sundance Ski Area and Brigham Young University's Aspen Grove facility. These two sources contribute approximately 30% of the use in the area. There is dispersed camping in the wilderness, and Mt. Timpanogos is designated as a wildlife viewing area. Developed camping occurs at the Theater-in-the-Pines Amphitheater/Group Site and in Mt. Timpanogos Campgrounds. Both of these are heavily used during the summer season, particularly on holidays and weekends. The Alpine Loop Scenic Backway (SR 92) is heavily used, especially during the fall, by bikers and motorists enjoying the scenery in the area. SR 92 is also groomed in the winter and receives considerable snowmobile use.

Other Resource Activities – No lands within the corridor are considered suitable for timber harvest, and there are no farming activities within the river corridor.

Special Designations – The Alpine Loop Scenic Backway (SR 92) are partly within the river corridor. The wild segment is within the Mt. Timpanogos Wilderness. Mt. Timpanogos is also designated as a wildlife viewing area.

Socio-Economic Environment – The entire river segment is located in Utah County, Utah. 2006 Census data indicates the population of Utah County is 464,460, and about 1,389 of these work in the entertainment and recreation industries. Utah County is an urban county, with about 343,000 acres (about 25%) of the 1,370,000-acre county in farms. An estimated 13,000 visitors use this corridor each year to access the Mt. Timpanogos Wilderness, and portions of the corridor are accessible year-around. This area receives an unusually high percent of visitors from outside the region than other areas of the Forest due to the proximity of Sundance Ski Area and Brigham Young University's (BYU) Aspen Grove facility. Sundance and BYUs Aspen Grove facility are located near/adjacent to, but not within the corridor. These facilities are major attractions that generate substantial economic contributions. The area has social ties to area communities; most visitors are within a 21 mile radius of Provo, Utah, and repeatedly return to the area (Recreation Facilities Master Plan).

Current Administration and Funding Needs if Designated – The current administering agency is the USFS. The following information is based on 2001 data, which doesn't account for inflation since 2001, but is the best available data. If a river is designated as Wild, Scenic, or Recreational, the actual cost of preparing the comprehensive river management plan would average \$200,000 per plan for 86 segments, which would cost approximately \$17.2 million the first two to three years following designation. It was estimated that annual management costs for a high complexity river would be \$200,000; a moderate complexity river would be \$50,000; and a low complexity river at \$25,000. Using an average of complexity costs, it would cost the Forest Service around \$7.8 million annually for 86 segments. (Estimated Costs of Wild and Scenic Rivers Program - V. 091104) The North Fork Provo River would likely be a low or moderate complexity river.

SUITABILITY FACTOR ASSESSMENT:

(1) The extent to which the State or its political subdivisions might participate in the shared preservation and administration of the river, including costs, should it be proposed for inclusion in the National System.

The entire corridor, as delineated is in Utah County, Utah, on NFS lands administered by the Uinta-Wasatch-Cache National Forest. The lower end of the corridor as delineated was truncated at the ownership boundary rather than being extended a ¼-mile below the end of the delineated reach of river. If it had not been truncated, the corridor would have extended onto nearby private land.

Utah County supported inclusion of this segment in the NWSRS when it was inventoried, but more recently they question the manageability of this segment (due to its short length) and do not support its designation. The State of Utah has not committed whether they would support preservation and administration of the river segment. Considering this, it is unlikely either the County or State would participate in the shared preservation and administration of the river.

(2) The state/local government's ability to manage and protect the outstandingly remarkable values on non-federal lands. Include any local zoning and/or land use controls that appear to conflict with protection of river values.

Not applicable, as the entire river corridor encompasses approximately 461 acres, and all of this is located on NFS lands administered by the Uinta-Wasatch-Cache National Forest. There are no non-federally managed lands within the corridor. Designation appears to be compatible with the zoning allocation (Mountain Resort and Recreation Zone) in the 1997 Utah County Plan.

(3) Support or opposition to designation.

Fourteen comment letters were received on the *Draft Inventory of Rivers on the Uinta National Forest Eligible for Inclusion in the National Wild and Scenic Rivers System (1997)*. One of these letters was from Utah County. The Utah County Planner supported the Forest's findings and stated "At this time, I would agree that the four river segments chosen for recommendation as part of the NWSRS findings (North Fork of the Provo River, South Fork of the American Fork River, Fifth Water Creek, and Little Provo Deer Creek) are great examples of scenic and unique river segments in the United States. While human impacts have left little truly "wild" areas within this area of the state, these rivers do reflect the wild and scenic characteristics that, I believe, are the intent of this Federal designation."

Additionally, three comments were received from the public on the *Draft Uinta National Forest Land and Resource Management Plan Environmental Impact Statement*. All three were in support of designation of river segments (2003 FEIS, Appendix L).

In response to scoping for the State-wide EIS, 5 comments specific to North Fork Provo River were received. The Mountainland Association of Governments and Utah County both questioned if it was wise to designate such short river segments considering the potential cost associated with management and that existing policies (i.e., wilderness designation) are in place to protect these segments. The Brigham Young University (BYU) Aspen Grove facility was not in favor of designation. They also commented that if this segment is designated, they would like to have the designated segment end at the campground boundary about ¼-mile above the property boundary as they are planning on building a number of new improvements and would prefer not to be guided by federal land use and resource management objectives. American Rivers and Utah Rivers Council/Center for Biological Diversity supported designation and commented that the segment has one of the most incredible, jaw dropping views along the Wasatch Front and receives a lot of visitor use.

In the recent State-wide DEIS comment period, the Forest Service received approximately 375 original responses and 2,183 organized campaign responses for a total of 2,558 total responses. The 2,183 organized campaign responses support a positive suitability finding and designation, as follows:

- ◆ There were six requests that the Forest Service designate about 20 rivers/river systems, including the

North Fork Provo River and Little Provo Deer Creek.

- ◆ There were 737 responses that support a positive suitability finding for all outstanding rivers in Utah's National Forests. This organized campaign response identified several rivers/river systems, including North Fork Provo River and Little Provo Deer Creek, as "the best of the best" in Utah's National Forests, especially deserving of the Wild and Scenic designation.
- ◆ There were 1,440 responses that support a positive suitability finding for all 86 eligible rivers in Utah's National Forests, listing about 40 (including North Fork Provo and Little Provo Deer Creek) that especially possess qualities that place them at the top of the list of rivers to be included.

Of the 375 original responses received on the State-wide DEIS, 13 related specifically and 3 generally related to river segments on the Uinta portion of the Uinta-Wasatch-Cache National Forest. The general responses supported suitability for all rivers in the study. Four of the 375 original responses specifically commented on North Fork Provo River. The Utah Rivers Council and two individuals supported suitability for all study rivers, and especially for some including this river. Utah Rivers Council also noted that thousands of others also supported this. The North Fork Special District opposed suitability, noting designation could severely impact the operation of their water system and that increasing the protection was unnecessarily.

(4) The consistency of designation with other agency plans, programs or policies and in meeting regional objectives.

All of this segment lies on NFS lands managed by the Uinta-Wasatch-Cache National Forest, and all of this river segment lies within Utah County, Utah. Designation is consistent with the 2003 Uinta Forest Plan direction. Designation appears to be compatible with the zoning allocation (Mountain Resort and Recreation Zone) in the 1997 Utah County Plan. The State of Utah, Division of Water Resources, expressed no concerns with designation of this segment when they commented on the 1997 Draft Inventory.

(5) Contribution to river system or basin integrity.

This segment contributes to the basin integrity as it incorporates the source of the North Fork Provo River. The majority of this segment is within the Mt. Timpanogos Wilderness Area, so designation of this stream segment would provide additional but similar protection to the stream. This 1.3-mile long segment would have more basin integrity if the segment was longer (e.g., it extended an additional 5.2 miles to the North Fork's confluence with the Provo River); however, the lower 5.2-mile reach is intermittent in places and was not found to have any outstandingly remarkable values.

(6) Demonstrated or potential commitment for public volunteers, partnerships, and/or stewardship commitments for management and/or funding of the river segment.

No commitment has been expressed to date. Brigham Young University's (BYU) Aspen Grove facility, which is located directly adjacent to but not within the corridor, and the North Fork Water Conservancy District, who uses water diverted from within the corridor, have expressed concern about designation. These two entities are highly influential, and with their concerns it is unlikely Utah County or the State would commit resources for management of this corridor. The nearby Sundance Ski Area might potentially be interested, but to date they have not commented. The Pleasant Grove Ranger District which manages this river has a long history of high volunteerism. It is likely that, regardless of the support or potential lack of support by the entities named above, volunteers would come forward or could be found to help with management of the river segment. It is less likely partners for funding management of this river segment would step forward.

South Fork American Fork
Uinta National Forest

Eligible Wild & Scenic Segments
 — Wild
 — Scenic
 — Recreational
 — Other Streams

— River Segment Under Study

County Boundaries

National Forest
 Wilderness
 Federal
 State
 Tribal
 Private

Water
 Major Roads
 Township/Range
 Section

1 0.5 0 1
 Miles

UTAH

GENERAL LOCATION

South Fork American Fork	Uinta-Wasatch-Cache National Forest, Pleasant Grove Ranger District, Utah County, Utah		Congressional District 3	
	Start – Legal Description	End – Legal Description	Classification	Miles
Segment 1	NE ¼ NE ¼ Sect. 6, T5S, R3E	NE ¼ NE ¼ Sect. 6, T5S, R 3 E	Wild	1.1
Segment 2	NW ¼ NW ¼ Sect. 32, T4S, R3E	NE ¼ NW ¼ Sect. 32, T4S, R3E	Recreational	0.3

Physical Description of River Segment: South Fork American Fork is a high mountain stream originates from a series of springs located in glacial cirques high on Mt. Timpanogos. The stream descends through a series of glacial cirques, down steep exposed glacial headwall cliffs, into a glacially carved valley below. Upper reaches of the stream are extremely steep with waterfalls in some places, the most prominent and well known being Scout Falls. The lower reaches have a gentler gradient. Most of the stream and its corridor is natural appearing and undisturbed except for trails, State Road 92 crossing, and Timpooneke Campground and trailhead located at the lower-most end of this river segment. Elevations along the segment range from about 7160 to 8200 feet.

ELIGIBILITY

This segment of South Fork American Fork is eligible for the National Wild and Scenic Rivers System as it is free flowing and has outstandingly remarkable scenic value. The portion of the stream within the Mt. Timpanogos Wilderness is potentially eligible as a wild river, while the portion below the wilderness boundary is eligible as a recreational river.

Name and Date of Eligibility Document: *Final Inventory of Rivers on the Uinta National Forest Eligible for Inclusion in the National Wild and Scenic Rivers System, January 1998.*

Determination of Free-flow: The South Fork American Fork has no diversions or other structures within this segment, and thus is free-flowing.

Summary of Outstandingly Remarkable Values:

Scenic Value – The stream course and features in the entire viewshed contribute significantly to the overall scenic quality of the segment. The stream course is steep, traversing from its alpine headwaters on Mt. Timpanogos through the forest below. There is a wide variety of vegetation in the corridor and along the stream including alpine grasses, forbs and wildflowers in the upper reaches; to riparian cottonwood, oak/maple, Douglas-fir, spruce-fir, and aspen forests with rich grass, forb and wildflower understories at the lower reaches. Similar vegetation communities and diversity can be found both within the corridor and on other mountain slopes adjoining the corridor and in the vicinity. In the fall, this diversity of vegetation communities is especially attractive with its mosaic of yellow, orange, red, browns and greens. This fall color attracts thousands of viewers to the American Fork Scenic Backway which crosses the very lower end of the corridor. Mt. Timpanogos is also widely known for its wild flowers. Each summer thousands of visitors traverse the Giant Staircase-Timpooneke Trail, a portion of a National Recreation Trail, through the corridor to view wildflowers found on the alpine meadows and slopes in, adjacent to, and above the corridor. The stream though small, is characterized by steep cascading runs and short waterfalls. Scout Falls, located at the very upper end of this segment, is a well-know and relatively popular local attraction. The Giant Staircase-Timpooneke Trail is generally not located immediately adjacent to the stream, but does lie within and extends the length of the corridor. Distant (but still within the corridor) views of the stream and falls contribute to the aesthetic and recreational appeal of this very heavily used trail. The stream descends from the heights of Mt. Timpanogos through a glacial cirque and valley. The exposed geologic strata and steep cliffs along the stream, in the corridor, and on nearby mountain slopes contribute to the scenic diversity and quality of the scenery. The summit of Mt. Timpanogos, located outside the corridor, provides a not to distant majestic scenic focal point for the scenery observed from the stream and trail. The Inventory rated this segment as scenic, regionally significant, with a high value in diversity of view, special features and seasonal variation. Cultural modification is highly appropriate.

CLASSIFICATION

Basis for the Classification of River Segment: Segment 1—Recreational; Segment 2—Wild
The portion of the stream within the Mt. Timpanogos Wilderness is eligible as a wild river, fully meeting

the wild criteria, while the portion below the wilderness boundary is eligible as a recreational river as there is substantial evidence of human activity and is mostly adjacent to roads.

SUITABILITY REPORT

Landownership and Land Uses – The entire 1.4 mile-long river corridor encompasses approximately 471 acres, and all of this is located on National Forest System (NFS) lands administered by the Uinta-Wasatch-Cache National Forest. The 2003 Uinta National Forest Land and Resource Management Plan (Uinta Forest Plan) made the following land allocations for this area:

Uinta Forest Plan Management Allocations				
Management Area	Overlying Management Prescription Allocation		Underlying Management Prescription Allocation	
American Fork	2.1 – Wild and Scenic Rivers – Wild	383 acres	1.4 - Wilderness	383 acres
	2.3 – Wild and Scenic Rivers – Recreation	151 acres	3.1 - Aquatic, Terrestrial and Aquatic Resource Emphasis	7 acres
			3.2 – Watershed Emphasis	9 acres
			4.4 - Dispersed Recreation Emphasis	45 acres
			4.5 - Dispersed Recreation Emphasis	26 acres

The entire South Fork American Fork river corridor is within the Critical Environmental Zone Planning Area of the Utah County General Plan. The intent and purpose of this zone includes conserving the water resource in a way that will assure a continued supply of pure water in the streams, springs, and wells which sustains the civilization occupying the valley floor of the county; most effectively use the wildlife resources found in the area; and conserve and use the valuable tourism and scenic resources of the county's uplands.

Mineral and Energy Resource Activities – There are no existing salable, locatable, or leasable mineral and energy resources development occurring in the corridor or adjacent area. This area is considered to have low potential for oil and gas resources. At this time, no lands within the corridor have been identified as available and suitable for leasing. The wild segment within the wilderness would not be open to leasing. An oil and gas leasing analysis is underway (decision anticipated winter 2008-2009), and this would determine the availability and suitability of the recreation segment for leasing. Due to the retention visual quality objective, Alpine Loop Scenic Backway, Timpooneke Campground and Altamont Campground the proposed action for this leasing analysis the recreation segment would make this segment available for leasing with No Surface Occupancy and Controlled Surface Use stipulations.

Water Resources Development – There are no historic, current or known Federal Energy Regulatory Commission permits or license applications filed for this segment. Designation into the National Wild and Scenic River System does not affect existing, valid water rights.

Transportation, Facilities, and Other Developments – Access to the river corridor is via Utah State Highway (SR) 92. This is a narrow paved highway that is open seasonally. SR 92 is a Scenic Backway. The only diversions or other structures on this river segment are two trail/road crossings located in the lower 0.3 miles of the corridor. These consist of a culvert crossing (3 small [~12"] culverts) for Utah State Road (SR) 92 and a bridge crossing (2 wooden bridges) where Trail #150 crosses the river.

Three trails pass through the corridor. The Giant Staircase-Timpooneke Trail, Forest Trail #053, is a well developed connecting the trailhead by SR 92 and Timpooneke Campground (CG) with the upper elevations and Aspen Grove (Mt. Timpanogos) Trail on Mt. Timpanogos. This trail is part of the Mt. Timpanogos National Recreation Trail. The Giant Staircase-Timpooneke Trail is heavily used, and is open to non-motorized, non-mechanized use. This trail follows the river for its length, though in most places the river is not directly adjacent to or visible from the trail. The trailhead has a parking lot with restrooms. The Timpooneke-Chris Flats section of the Great Western Trail, Forest Trail #151, connects Trail #053 and Timpooneke CG with other trails and points west. Forest Trail #150, another section of the GWT, connects Trail #053 and Timpooneke CG with other trails and points northeast. A bridge (2 wooden structures crossing the twin channels) on this portion of the GWT crosses, but does not impede, the stream. Both of these sections of the GWT are open to nonmotorized and single-track motorized (motorcycle) use.

Part of Timpooneke Campground adjoins the river, and about 26 of the 55 acres of this campground are within the river corridor. This campground has 13 single family camp units, 7 double family camp units, 7 single family horse camp units, 1 group site, and 2 double family horse camp units. Facilities include 9 horse corrals, 2 stock watering troughs, 9 vault toilet buildings, 1 water system, 1 entry station, and 1 host site with sewer holding tank. The Altamont Group Site Campground also lies just below the river corridor and has a 100-person capacity. The site includes a pavilion and a flush toilet building with septic system. Both of these facilities are currently operated by concessionaire.

The Forest Service's Timpooneke Guard Station Administrative Site is also within the corridor. This site consists of a house, 2-stall garage and outhouse. This site is eligible for the National Register of Historic Places, and is used seasonally by Forest Service employees.

Grazing Activities – None of the corridor is within an open grazing allotment and no lands within the corridor are considered suitable for domestic livestock grazing.

Recreation Activities – Scenic views from the stream are very striking. Majestic views of Mt. Timpanogos and seasonal variability in the colors of aspen, wild flowers, and other vegetation add to the experience. Recognizing this attraction, the Mt. Timpanogos (including the Giant Staircase-Timpooneke trail) National Recreation Trail was designated and is partly within the river corridor. The trail is a popular route to Emerald Lake, to the summit of Mt. Timpanogos, and to Aspen Grove. Aside from this scenic viewing, most recreation use is focused on hiking and horseback riding, although there is some wilderness dispersed camping in the corridor. The stream is not the primary focus of recreation use, but it does add to the diversity of the overall backcountry experience. The season of use is about 4 months. The stream cannot support white-water recreation. An estimated 9,000 visitors use this corridor to access the Mt. Timpanogos Wilderness each year, of whom an estimated 20% are from outside the region. The difficulty of the hike up Timpanogos keeps this level of use relatively moderate compared to use on some other local trails.

Developed camping occurs at the Altamont Group Site and in Timpooneke Campgrounds. Both of these are heavily used during the summer season, particularly on holidays and weekends. The Alpine Loop National Scenic Backway (SR 92) is heavily used, especially during the fall, by bikers and motorists enjoying the scenery in the area. SR 92 is also groomed in the winter and receives considerable snowmobile use.

Other Resource Activities – No lands within the corridor are considered suitable for timber harvest, and there are no farming activities within the river corridor.

Special Designations – The Giant Staircase-Timpooneke Trail section of the Mt. Timpanogos National Recreation Trail and Alpine Loop Scenic Backway (SR 92) are partly within the river corridor. The wild segment is within the Mt. Timpanogos Wilderness. Mt. Timpanogos is also designated as a wildlife

viewing area.

Socio-Economic Environment – The entire river segment is located in Utah County, Utah. 2006 Census data indicates the population of Utah County is 464,460, and about 1,389 of these work in the entertainment and recreation industries. Utah County is an urban county, with about 343,000 acres (about 25%) of the 1,370,000-acre county in farms. An estimated 9,000 visitors use this corridor to access the Mt. Timpanogos Wilderness each year, of whom an estimated 20% are from outside the region.

Current Administration and Funding Needs if Designated – The current administering agency is the USFS. The following information is based on 2001 data, which doesn't account for inflation since 2001, but is the best available data. If a river is designated as Wild, Scenic, or Recreational, the actual cost of preparing the comprehensive river management plan would average \$200,000 per plan for 86 segments, which would cost approximately \$17.2 million the first two to three years following designation. It was estimated that annual management costs for a high complexity river would be \$200,000; a moderate complexity river would be \$50,000; and a low complexity river at \$25,000. Using an average of complexity costs, it would cost the Forest Service around \$7.8 million annually for 86 segments. (Estimated Costs of Wild and Scenic Rivers Program - V. 091104) The South Fork American Fork River would likely be a low or moderate complexity river.

SUITABILITY FACTOR ASSESSMENT:

(1) The extent to which the State or its political subdivisions might participate in the shared preservation and administration of the river, including costs, should it be proposed for inclusion in the National System.

The entire corridor is located on NFS lands within Utah County, Utah. Utah County supported inclusion of this segment in the NWSRS when it was inventoried, but more recently they question the manageability of this segment (due to its short length) and do not support its designation. The State of Utah has not committed whether they would support preservation and administration of the river segment. Considering this, it is unlikely either the County or State would participate in the shared preservation and administration of the river. Neither Utah County nor the State commented on this in the recent State-wide DEIS comment period.

(2) The state/local government's ability to manage and protect the outstandingly remarkable values on non-federal lands. Include any local zoning and/or land use controls that appear to conflict with protection of river values.

Not applicable, as the entire river corridor encompasses approximately 471 acres, and all 471 acres are NFS lands administered by the Uinta-Wasatch-Cache National Forest. Designation appears to be compatible with the zoning allocation (Critical Environmental Zone) in the 1997 Utah County Plan.

(3) Support or opposition to designation.

Fourteen comment letters were received on the *Draft Inventory of Rivers on the Uinta National Forest Eligible for Inclusion in the National Wild and Scenic Rivers System (1997)*. One of these letters was from Utah County. The Utah County Planner supported the Forest's findings and stated "At this time, would agree that the four river segments chosen for recommendation as part of the NWSRS findings (North Fork of the Provo River, South Fork of the American Fork River, Fifth Water Creek, and Little Provo Deer Creek) are great examples of scenic and unique river segments in the United States. While human impacts have left little truly "wild" areas within this area of the state, these rivers do reflect the wild and scenic characteristics that, I believe, are the intent of this Federal designation." The State of Utah, Division of Water Resources, had "no concerns". The Superintendent of Timpanogos Cave National Monument, National Park Service, commented that "We find the draft's discussion appropriate and concur with its findings".

Additionally, three comments were received from the public on the *Draft Uinta National Forest Land and Resource Management Plan Environmental Impact Statement*. All three were in support of designation of

river segments (2003 FEIS, Appendix L).

In response to scoping for the recent State-wide EIS, 2 comments specific to South Fork American Fork were received. The Mountainland Association of Governments and Utah County both questioned if it was wise to designate such short river segments considering the potential cost associated with management and that existing policies (i.e., wilderness designation) are in place to protect these segments.

In the recent State-wide DEIS comment period, the Forest Service received approximately 375 original responses and 2,183 organized campaign responses for a total of 2,558 total responses. The 2,183 organized campaign responses support a positive suitability finding and designation, as follows:

- ◆ There were six requests that the Forest Service designate about 20 rivers/river systems, but South Fork American Fork was not one of those identified.
- ◆ There were 737 responses that support a positive suitability finding for all outstanding rivers in Utah's National Forests. This organized campaign response identified several rivers/river systems as "the best of the best" in Utah's National Forests, especially deserving of the Wild and Scenic designation. South Fork American Fork was not one of those identified.
- ◆ There were 1,440 responses that support a positive suitability finding for all 86 eligible rivers in Utah's National Forests listing about 40 that especially possess qualities that place them at the top of the list of rivers to be included. South Fork American Fork was not one of those listed.

Of the 375 original responses received on the State-wide DEIS, 13 related specifically and 3 generally related to river segments on the Uinta portion of the Uinta-Wasatch-Cache National Forest. The general responses supported suitability for all rivers in the study. One of the 375 original responses specifically commented on South Fork American Fork. This commenter supported suitability noting the river was a peaceful and beautiful place.

(4) The consistency of designation with other agency plans, programs or policies and in meeting regional objectives.

All of this segment lies on NFS lands managed by the Uinta-Wasatch-Cache National Forest, and all of this river segment lies within Utah County, Utah. Designation is consistent with the 2003 Uinta Forest Plan direction. In addition, designation appears to be compatible with the zoning allocation (Critical Environmental Zone) in the 1997 Utah County Plan. The State of Utah, Division of Water Resources, expressed no concerns with designation of this segment when they commented on the 1997 Draft Inventory. Utah County did not comment on this subject in the recent State-wide DEIS comment period.

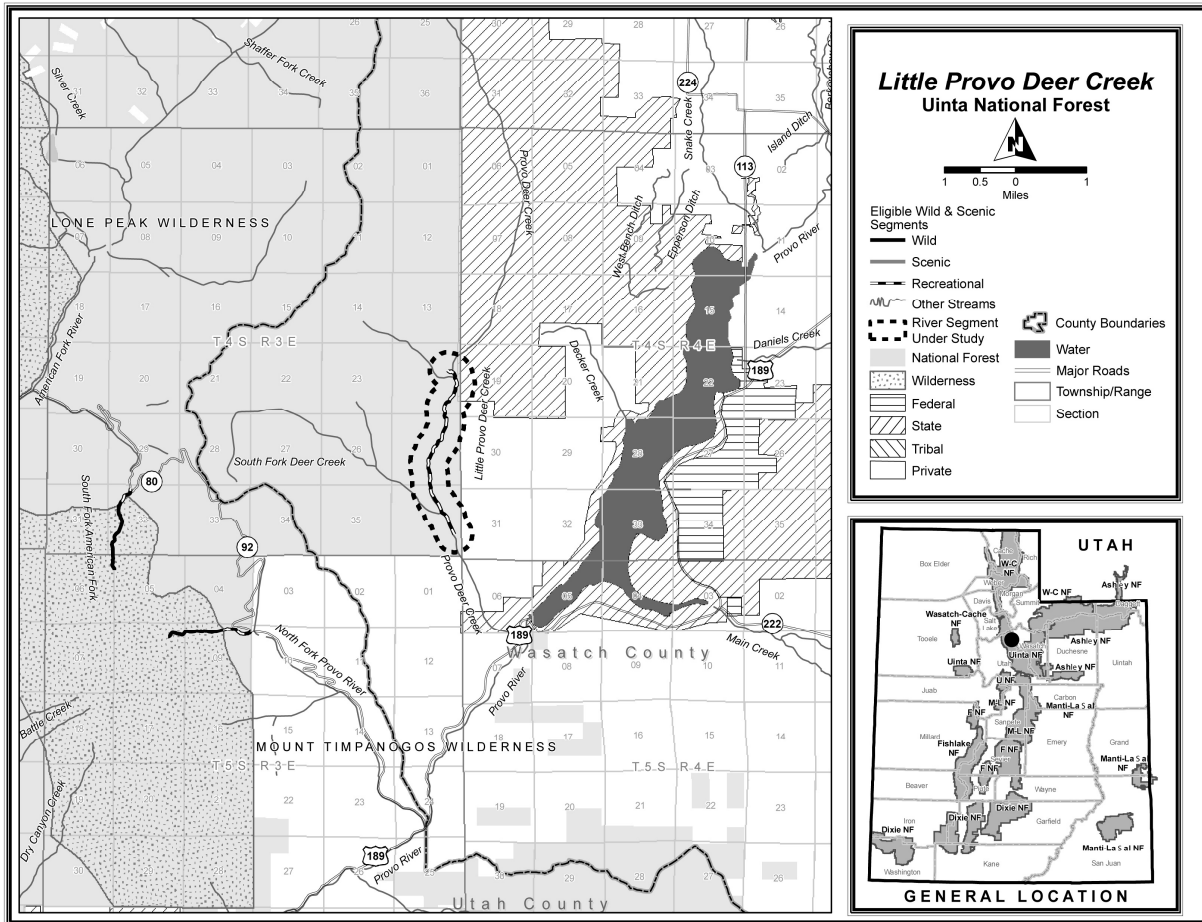
(5) Contribution to river system or basin integrity.

This segment contributes to the basin integrity as it incorporates a primary source of the South Fork American Fork River. The majority of this segment is within the Mt. Timpanogos Wilderness Area, so designation of this stream segment would provide additional but similar protection to the stream. This 1.4-mile long segment would have more basin integrity if the segment was longer (e.g., it extended an additional 3.4 miles to the South Fork's confluence with the North Fork American Fork); however, the lower reaches were not found to have any outstandingly remarkable values.

(6) Demonstrated or potential commitment for public volunteers, partnerships, and/or stewardship commitments for management and/or funding of the river segment.

No commitment has been expressed to date. The Pleasant Grove Ranger District which manages this river has a long history of high volunteerism and if the river were designated, it is highly likely volunteers would come forward or could be found to help with management of the river segment. It is less likely partners for funding management of this river segment would step forward.

Little Provo Deer Creek Suitability Evaluation Report (SER)



STUDY AREA SUMMARY

Name of River: Little Provo Deer Creek

River Mileage:

Studied: 2.6 miles from road crossing in the southern quarter of Section 36, T. 4 S., R. 3 E. to the top of Cascade Springs following the tributary stream to Cascade Springs from Little Provo Deer Creek.

Eligible: Same

Location:

Little Provo Deer Creek	Uinta National Forest, Pleasant Grove Ranger District, Wasatch County, Utah		Congressional District 2	
	Start	End	Classification	Miles
Segment 1	NE1/4 SE1/4, Sect. 36, T. 4 S., R. 3 E., SLM	SE 1/4 NE 1/4, Sect. 24, T. 4 S., R. 3 E., SLM	Recreational	2.6

Physical Description of River Segment: Little Provo Deer Creek is in many ways a typical Wasatch Mountains stream. However, it does have some unusual characteristics that set it apart from others. Elevations along the study segment range from about 5,680 to 6,240 feet. Water quality in Cascade

Springs and the tributary connecting Cascade Springs to Little Provo Deer Creek is good. However, water quality in the Little Provo Deer Creek is being impacted by sediment from erosion from the stream channel and cutbanks along the stream and from roads, both within and upstream of this segment.

The stream was segmented above Cascade Springs because of this very unusual feature, and because the stream upstream of Cascade Springs is substantially smaller, and the stream is impacted by roads and potentially by water diversions. The stream was segmented below the road crossing because the stream below this point is heavily impacted by roads and water withdrawals.

Cascade Springs is a unique feature. Cascade Springs is a relatively large set of perennial springs and cascading limestone pools that are unusual geological and hydrologic features for the region of consideration. Several levels of naturally developed cascading pools with clear spring waters and wetlands, are present and these and the adjoining uplands are inhabited by a wide variety of flora and fauna.

ELIGIBILITY

Name and Date of Eligibility Document: Final Inventory of Rivers on the Uinta National Forest Eligible for Inclusion in the National Wild and Scenic Rivers System, January 1998

Determination of Free-flow: This segment of Little Provo Deer Creek is free of major channel modification, and is free of major structures, and is thus free flowing. The Cascade Springs Recreation Site lies within the corridor, and has several trails, boardwalks and bridges adjacent to or crossing the pools and/or stream. However, these have minimal effect on the free-flowing character of the segment. The Little Deer Creek Road runs parallel to the stream the entire length of the segment, but does not affect this stream segment's free-flowing character. Portions of two other roads lie within the corridor, but these do not cross the stream or affect the free-flowing nature of the study stream segment. There are several water rights that potentially affect streamflows in the eligible segment. The Forest Service holds a number of these, including one just outside the corridor which provides water for the Cascade Springs Recreation Site. These have minimal affect on flows at the springs or in the stream.

The segment of Little Provo Deer Creek upstream of the eligible segment (i.e. Cascade Springs Recreation Site to the headwaters) is impacted by road crossings. In addition, Wasatch State Park maintains a water right for about 2.0 cfs for irrigation use. Exercise of this water right does not affect the flow or the character of Cascade Springs, but does substantially reduce flows in the segment of Little Provo Deer Creek upstream of the eligible segment. This water use also reduces flows in the eligible segment; however, the flows from Cascade Springs are significant (approximately 50 cfs) and are sufficient to maintain ecological values in the eligible corridor.

The segment of Little Provo Deer Creek downstream of the eligible segment is heavily impacted by numerous road crossings, road incursions, and water withdrawals. At the very lower end of this segment (from the railroad crossing downstream to the confluence with Provo River), the stream is heavily modified and in places is rip-rapped. The Canyon Meadows Mutual Water Company also maintains a groundwater right for 0.17 cfs for domestic use. The point of diversion for this water right is located just over ¼-mile below the downstream end of the eligible corridor and just below the eligible segment corridor.

Determination of Outstandingly Remarkable Values: The study corridor was found to have two stream-related outstandingly remarkable values: geological/hydrological and ecological. Both of these are interrelated in that both are heavily influenced by unusual features that create and form Cascade Springs, and the educational/scientific value Cascade Springs affords.

Geological/Hydrological Value – This segment was found to have an outstandingly remarkable geologic/hydrologic value because the stream segment was judged to have moderately high value for the abundance of geologic/hydrologic features, and high geologic/hydrologic values for diversity of features, and educational/scientific uses these are providing.

Cascade Springs is a big perennial spring complex that significantly augments water flows to the stream, and has interesting geological and hydrologic characteristics. The springs form an unusual environment for the area. Several levels of naturally developed cascading pools with clear spring waters and wetlands are inhabited by a wide variety of flora (cattails, watercress, and wildflowers) and fauna. This is a very unusual environment for the area. The springs' cool riparian setting makes them a popular attraction, and an interpretive site has been developed here because of this character. Cascade Springs was developed in the 1980's as an environmental education site and is a popular attraction for local users. Its boardwalks, bridges, paved paths, and interpretive signing make this unusual setting a very pleasant and popular destination. Educational groups use the springs as a teaching site, and it is a designated wildlife viewing area.

Ecological value – This segment was found to have an outstandingly remarkable ecological value because the stream corridor was determined to have moderately high value for the ecological function and rare communities, and a high value for species diversity, and ecological-related educational/scientific use and value the area affords.

Riparian forest communities occur around Cascade Springs and along Little Provo Deer Creek and South Fork Deer Creek, and Gambel oak and sagebrush-grass communities occur in the upland portions of the corridor. Cascade Springs is an unusual environment for the area. Several levels of natural limestone cascading pools with clear spring waters and wetlands are inhabited by a wide variety of flora (cattails, watercress, and wildflowers) and fauna. The pools are currently inhabited by German brown trout, rainbow trout, and some Bonneville cutthroat trout. Utah Division of Wildlife Resources and Uinta National Forest are considering a potential future (possible 2009-2011) project to further the recovery of Bonneville cutthroat trout, a Forest-Service Intermountain Region and State of Utah listed sensitive species, and to improve habitat quality, water quality and ecological integrity of study corridor. Although no other rare species of flora or fauna are known to inhabit the corridor, the biological communities found in the corridor are unusually diverse and complex. There are many species of noxious weeds in the corridor. These have been and will continue to be targeted for control and eradication.

The 2003 Cascade II fire burned about 8,000 acres in the area, including the study corridor. Burn intensities varied throughout the fire, and within the corridor. Significant efforts were made to restore areas intensely burned. The grass-forb plant communities have since recovered, and most of the moderate-intensively burned riparian forest and upland shrub communities within the corridor have resprouted. Aquatic resources within the corridor were minimally affected by the burn. Informational signs were placed at Cascade Springs regarding the burn, burned area rehabilitation, and ecological implications of fire.

CLASSIFICATION

Basis for the Classification of River Segment– Recreational

Little Provo Deer Creek is classified as recreational river due to the presence of the Cascade Springs Recreation Site development, full-length access by roads, and the overall substantial evidence of human activity.

SUITABILITY REPORT

Landownership and Land Uses – The entire river corridor encompasses approximately 843 acres, and all of this is located on National Forest System (NFS) lands administered by the Uinta National Forest.

The 2003 Uinta National Forest Land and Resource Management Plan (Uinta Forest Plan) made the following land allocations for this area:

Uinta Forest Plan Management Allocations				
Management Area	Overlying Management Prescription Allocation		Underlying Management Prescription Allocation	
Lower Provo	2.3 – Wild and Scenic Rivers – Recreation	843 acres	3.1 – Aquatic, Terrestrial and Aquatic Resource Emphasis	562 acres
			4.4 - Dispersed Recreation Emphasis	272 acres
			4.5 - Dispersed Recreation Emphasis	10 acres

Little Provo Deer Creek is within the Wasatch Mountain Planning Area of the Wasatch County General Plan (2001-2016). The Wasatch County General Plan states that land uses in the Wasatch Mountains Planning Area should be limited to watershed protection, recreation, livestock grazing and wildlife habitat. If summer homes and recreational resorts are permitted, they should be in harmony with the natural setting, be developed in such a way as to not significantly degrade the quality of the environment and provide all essential utilities.

Mineral and Energy Resource Activities – There are no existing salable, locatable, or leasable mineral and energy resources development occurring in the vicinity. At this time, there is no leasable land available. Oil and gas resource potential for this area is considered low. An oil and gas leasing analysis is underway; there would likely be lands available for lease once completed.

Water Resources Development – There has been no Federal Energy Regulatory Commission permits or license applications filed. There is no farmland within the vicinity. However, BOR has withdrawn lands downstream of the studied segment for support of the Provo River CUP-Bonneville Unit. Designation into the Wild and Scenic river system does not affect existing, valid water rights.

Transportation, Facilities, and Other Developments – Within the corridor for the eligible river segment, there are sections of three roads, the Cascade Springs Recreation Site, and the South Cascade Dispersed Camping Site. A right of way also exists for the State of Utah across the corridor.

The Cascade Springs Recreation Site is a day-use area that includes a boardwalk/paved/graveled trail network, three restrooms, two paved parking areas, a kiosk/building, and several benches and interpretive signs. The Cascade Springs trail network consists of a set of paved trails connecting the parking areas, kiosk, and restrooms with a series of trails that encircle or cross the Cascade Springs pools. Two bridges and a boardwalk allow water from the springs and Little Provo Deer Creek to pass largely unimpeded. Sections of the trail network are barrier-free. The kiosk/building is used during educational/interpretive activities.

The Cascade Springs Scenic Drive [Forest Road (FR) #114] accesses Cascade Springs. This is a paved, 2-lane road maintained by the Forest Service. This road connects to the Alpine Loop (State Road 92), and via the Cascade Springs Road (FR #216) and a Wasatch County road through Wasatch Mountain State Park to Midway, Utah. FR #216 is a native-surfaced Maintenance Level 3 road that becomes soft and slick when wet. The Wasatch County road is similar to the Cascade Springs Road.

The general area is accessed by several local roads and contains several undeveloped dispersed camping spots. The Little Deer Creek Road (FR #475), runs south from Cascade Springs along the stream,

eventually crossing the stream several times and provides access from Cascade Springs to Provo Canyon. The lower extent of the eligible river segment is located at the northern-most FR #475 stream crossing. FR #475 is a Maintenance Level #2, high-clearance vehicle road that becomes soft when wet. It is generally very rough, and steep and rocky in spots.

Above Cascade Springs and in the stream reach below the segment (outside the study corridor), and above Deer Creek State Park, the stream is heavily impacted by road incursions. In a few places fill from the adjacent road has encroached into the channel.

Grazing Activities – The northern portion of the eligible river segment and corridor are within the Deer Creek Sheep and Goat Allotment. This allotment is shared with Wasatch Mountain State Park, and has been vacant for several years. There are no known proposals for or plans to reopen this allotment to grazing, due to conflicts with recreation use, water quality concerns, and potential interaction with bighorn sheep on Mt. Timpanogos.

Recreation Activities – A variety of dispersed recreation activities occur in the area. The pools at Cascade Springs are closed to fishing, but the nearby stream does provide fishing opportunities. Some hunting and dispersed camping also occurs in the area. The Cascade Springs Drive, #114, is groomed in the winter and receives heavy snowmobile use. The Little Deer Creek Road, #475, and connecting roads in adjoining Wasatch Mountain State Park are open for ATV, motorcycle, and other motorized vehicle use, and use of these is heavy. The Cascade Springs Scenic Drive and connecting road into Midway are heavily used by recreationists driving for pleasure, viewing the scenery (including distant views of Mt. Timpanogos and the Provo Peak area), and accessing Cascade Springs.

Wasatch Mountain State Park is heavily used for similar purposes, and has additional attractions such as golf courses, snow tubing area, and Nordic skiing center. The lands in Deer Creek State Park below the segment exhibit evidence of heavy recreation use. Homestead Resort has a permit for outfitter and guide snowmobiling service that includes the eligible river corridor.

Other Resource Activities – There is no timberland or farmland within the eligible river corridor. Thus, no lands within the corridor are considered suitable for timber harvest, and there are no farming activities within the river corridor.

Special Designations – Cascade Springs is a designated wildlife viewing area and interpretive site. Cascade Springs has boardwalks, bridges, paved paths, and interpretive signing.

Socio-Economic Environment – The entire river segment is located in Wasatch County, Utah. 2006 Census data indicates the population of Wasatch County is 20,255, and about 1,023 of these work in the entertainment and recreation industries. Farms encompass about 69,600 acres (about 9%) in the 774,000-acre Wasatch County. This area is very popular with recreationists, many of these are non-resident visitors to nearby Sundance and BYU's Aspen Grove facility. These facilities are major attractions that generate substantial economic contributions.

Current Administration and Funding Needs if Designated – The current administering agency is the USFS.

The following information is based on 2001 data, which doesn't account for inflation over the past six years, but is the best available data. If a river is designated as Wild, Scenic, or Recreational, the actual cost of preparing the comprehensive river management plan would average \$200,000 per plan for 86 segments, which would cost approximately \$17.2 million the first two to three years following designation. It was estimated that annual management costs for a high complexity river would be \$200,000; a moderate complexity river would be \$50,000; and a low complexity river at \$25,000. Using

an average of complexity costs, it would cost the Forest Service around \$7.8 million annually for 86 segments. (Estimated Costs of Wild and Scenic Rivers Program - V. 091104)

SUITABILITY FACTOR ASSESSMENT:

(1) The extent to which the State or its political subdivisions might participate in the shared preservation and administration of the river, including costs, should it be proposed for inclusion in the National System.

The entire corridor, as delineated is in Wasatch County, Utah, on NFS lands administered by the Uinta National Forest. However, in spots the corridor width, as delineated, was truncated at the ownership boundary rather than being extended the full ¼-mile. If it were, the corridor would extend onto nearby Wasatch Mountain State Park in one reach, and onto private land in another. Neither of these entities commented on this river corridor during the Draft Inventory or the Forest Plan revision process.

Wasatch County provided two comments on the *Draft Inventory of Rivers on the Uinta National Forest Eligible for Inclusion in the national Wild and Scenic Rivers System (1997)*. The County Planner stated they felt designation would conflict with the County Resolution 97-19. The County Board of Commissioners stated their “resolve to oppose and resist any such designation”. The Commissioners felt that “cultural and traditional uses of adjacent public lands would be severely limited and the economy of our county could be unnecessarily affected.”

More recently (scoping comments for the State-wide EIS) Wasatch County indicated they do not feel this segment is eligible, and do not support inclusion of this segment in the NWSRS. They commented that this segment is extensively used for multiple use resources; many opportunities enjoyed by the public could be compromised by the decision to include the segment, and that in their opinion, this stream is nothing more than a typical Wasatch Mountains stream. The State of Utah has not committed whether they would support preservation and administration of the river segment. Considering this, it is unlikely either the County or State would participate in the shared preservation and administration of the river.

(2) The state/local government’s ability to manage and protect the outstandingly remarkable values on non-federal lands. Include any local zoning and/or land use controls that appear to conflict with protection of river values.

Not Applicable, as the entire river corridor encompasses approximately 843 acres, and all of this is located on NFS lands administered by the Uinta National Forest. The eastern edge of the corridor, as delineated, is truncated in places at the Forest boundary and does not extend a full ¼ mile in places where this would have encompassed privately-owned lands and State lands managed by Wasatch Mountain State Park. Designation appears to be compatible with the zoning allocation (Wasatch Mountain Planning Area) in the Wasatch County General Plan which states that land uses should be limited to watershed protection, recreation, livestock grazing and wildlife habitat.

(3) Support or opposition to designation.

Fourteen comment letters were received on the *Draft Inventory of Rivers on the Uinta National Forest Eligible for Inclusion in the national Wild and Scenic Rivers System (1997)*. As stated under Suitability Factor 1, Wasatch County did not support designation of the River segment. The State of Utah, Division of Water Resources, had no concerns. Many respondents wanted to see additional segments of rivers designated.

Additionally, three comments were received from the public on the Draft Uinta National Forest Land and Resource Management Plan Environmental Impact Statement. All three were in support of designation of river segments (FIES, appendix L).

In the recent state-wide EIS scoping, 5 comments specific to Little Provo Deer Creek were received. Wasatch County commented they do not feel this segment is eligible and that they do not support

inclusion of this segment in the NWSRS. The County also commented that this segment is extensively used for multiple use resources; many opportunities enjoyed by the public could be compromised by the decision to include the segment, and that in their opinion, this stream is nothing more than a typical Wasatch Mountains stream. The Mountainland Association of Governments questioned if it was wise to designate such short river segments considering the potential cost associated with management and that existing policies are in place to protect this segment. The Central Utah Water Conservancy District (CUWCD) commented that they operate a gauging station on the stream and that measurements from this station are used to determine minimum stream flows in the Provo River. They indicated that this ability needs to be maintained in order to meet water right deliveries and obligations. In addition, CUWCD noted that there is a water treatment diversion and other irrigation diversion on the stream, and concluded that because of these facilities, they do not believe this stream is appropriate for WSR designation. American Rivers and Utah Rivers Council/Center for Biological Diversity support designation of this river and both noted that this stream, and particularly Cascade Springs, provides great recreational values and incredible interpretive opportunities.

In the recent State-wide DEIS comment period, the Forest Service received approximately 375 original responses and 2,183 organized campaign responses for a total of 2,558 total responses. The 2,183 organized campaign responses support a positive suitability finding and designation, as follows:

- ◆ There were six requests that the Forest Service designate about 20 rivers/river systems, but Little Provo Deer Creek was not one of those identified.
- ◆ There were 737 responses that support a positive suitability finding for all outstanding rivers in Utah's National Forests. This organized campaign response identified several rivers/river systems as "the best of the best" in Utah's National Forests, especially deserving of the Wild and Scenic designation. Little Provo Deer Creek was not of those identified.
- ◆ There were 1,440 responses that support a positive suitability finding for all 86 eligible rivers in Utah's National Forests listing about 40 that especially possess qualities that place them at the top of the list of rivers to be included. Little Provo Deer Creek was one of those listed.

(4) The consistency of designation with other agency plans, programs or policies and in meeting regional objectives.

The entire segment lies on NFS lands managed by the Uinta National Forest, and the entire segment lies within Wasatch County, Utah. Designation is consistent with the 2003 "Uinta National Forest Land and Resource Management Plan" direction. The eastern edge of the corridor, as delineated, is truncated in places at the Forest boundary and does not extend a full ¼ mile in places where this would have encompassed privately-owned lands and State lands managed by Wasatch Mountain State Park. Wasatch Mountain State Park has not commented on compatibility of designation with management of this Park. Designation appears to be compatible with the zoning allocation (Wasatch Mountain Planning Area) in the Wasatch County General Plan which states that land uses should be limited to watershed protection, recreation, livestock grazing and wildlife habitat. Wasatch County has stated that they do not support designation of this river.

(5) Contribution to river system or basin integrity.

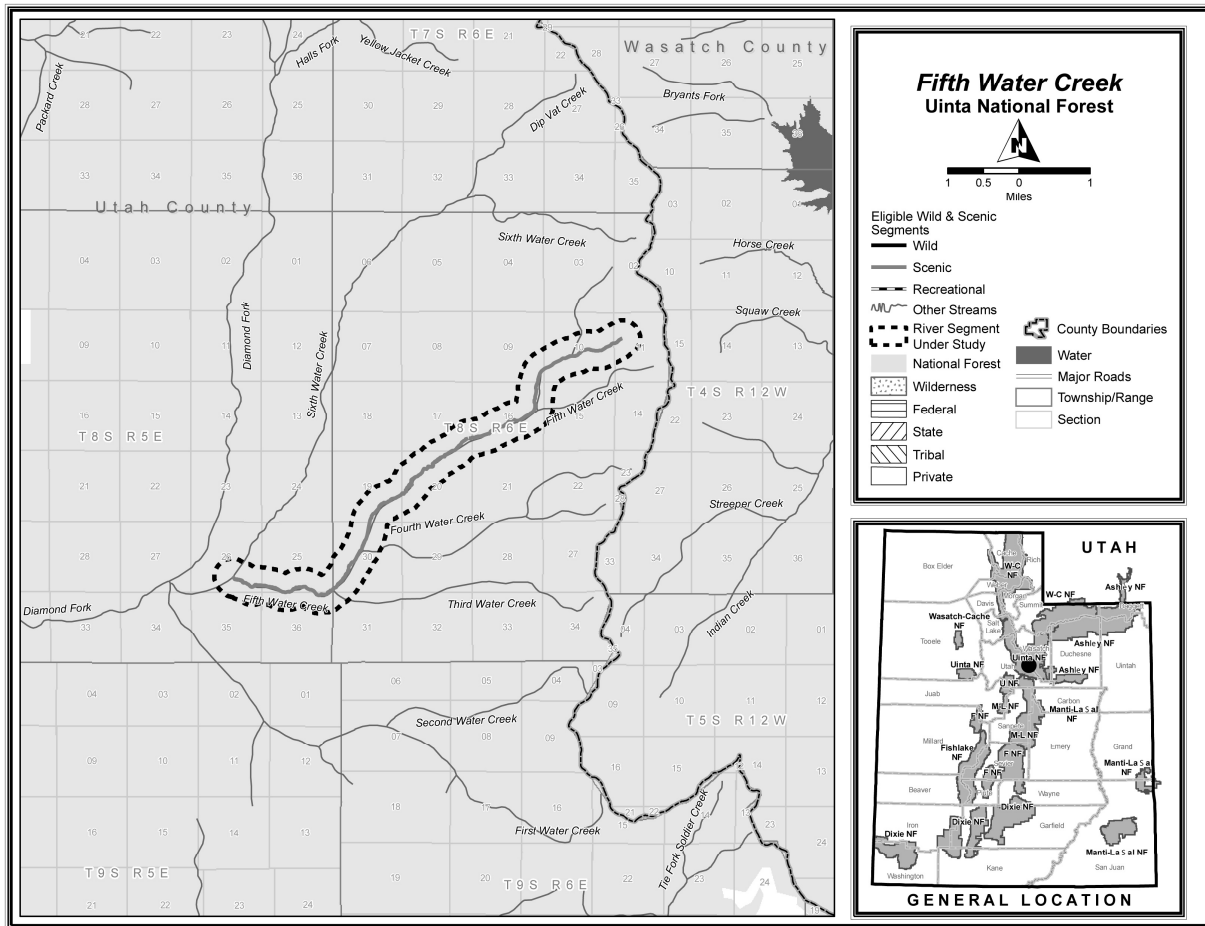
This segment contributes to the basin integrity as it incorporates Cascade Springs and its source. Designation of this stream segment would provide additional protection to Cascade Springs and the stream below it. This 2.6-mile long segment would have more basin integrity if the segment was longer (e.g., it extended an additional 6.9 miles upstream of the segment to the source of Little Provo Deer Creek, and if it extended an additional 1.9 miles downstream of the segment to the stream's confluence with the Provo River); however, these reaches extend off-Forest, are heavily impacted by water diversions and other land uses, and were not found to have any outstandingly remarkable values.

(6) Demonstrated or potential commitment for public volunteers, partnerships, and/or stewardship commitments for management and/or funding of the river segment.

No commitment has been expressed to date. Wasatch Mountain State Park which adjoins the river corridor might potentially be interested in sharing management commitments; however, they have not commented on designation or indicated such interest to date. Wasatch County has clearly indicated they do not support designation and therefore, would be unlikely to contribute resources for management of this river segment.

Visitors from Brigham Young University's (BYU) Aspen Grove facility and Sundance Ski Area, which are located a few miles west of the corridor, frequently visit Cascade Springs. Consequently these entities may potentially be interested, but to date they have not offered such support. The Pleasant Grove Ranger District which manages this river has a long history of high volunteerism. It is likely, that irregardless of the support or potentially lack of it by the entities named above, that volunteers would come forward or could be found to help with management.

Fifth Water Creek Suitability Evaluation Report (SER)



STUDY AREA SUMMARY

Name of River: Fifth Water Creek

River Mileage:

Studied: 7.8 miles from the Sixth Water Creek confluence to headwaters

Eligible: same

Location:

Fifth Water Creek	Uinta National Forest, Spanish Fork Ranger District, Utah County, Utah		Congressional District 3	
	Start	End	Classification	Miles
Segment 1	SE ¼ Sect. 26, T 8 S, R 5 E, SLM	NW ¼ Sect. 11, T 8 S, R 6 E, SLM	Scenic	7.8

Physical Description of River Segment: Fifth Water Creek is in most respects a relatively typical Wasatch Range upland tributary stream that joins with other similar streams to add to a larger river (Diamond Fork). This stream flows from an elevation of about 7900 feet at its headwaters near Strawberry Ridge and drops to about 6400 feet at the confluence with Sixth Water Creek. The segment contains an unusual hot springs and several small waterfalls, the largest of which has a drop of about 12-

14 feet. Water temperatures have been measured ranging from 122 to 129 degrees Fahrenheit at the hot springs, while summer temperatures in the adjacent creek were 57 degrees.

ELIGIBILITY

Name and Date of Eligibility Document: Final Inventory of Rivers on the Uinta National Forest
Eligible for Inclusion in the National Wild and Scenic Rivers System, January 1998

Determination of Free-flow: Fifth Water Creek is free of major channel modification, and is free of major structures, and is thus free flowing. There are no diversions on Fifth Water Creek, and only one culvert crosses the creek. The road that crosses the creek in the middle of the segment, the trail crossing, and short road segment and trail segments that run along the creek are within the corridor, but do not significantly affect the stream channel, its ability to flow freely, or other stream characteristics. The stream channel and riparian corridor have been modified indirectly over the last 75 years due to channel incision related to construction and operation of CUP facilities, flow augmentation in Sixth Water Creek, erosive soils and geology, and historic grazing impacts.

Determination of Outstandingly Remarkable Values:

Recreation – The hot springs are a major visitor attraction, drawing bathers year-round from a surprisingly broad area considering that the feature is not particularly large, and it is relatively remote. An estimated 15,000 to 20,000 visitors hike or bike into the hot springs annually, with about 10-20% coming from outside the region. Trail # 015 is the only developed recreation available to the users of the corridor, but dispersed camping is practiced by those using the hot springs, and for hunting, fishing, hiking, biking and motorcycle riding. Access to the area is easy with paved access up Diamond Fork Creek and also crossing near the middle of the segment, with trail and a short segment of native surface road paralleling most of the remainder of the segment. The hot springs can be accessed from either road by a hiking trail that follows the stream. Most of the upper reaches of the segment can be reached by a motorcycle trail connecting the paved Sheep Creek-Rays Valley Road to the Great Western Trail and onto the Strawberry Ridge Road. General Recreation with a high value in length of season and experience quality, moderate value in diversity of use and attractions, low value in site and facilities and a low to moderate value in associated opportunities.

CLASSIFICATION –

Basis for the Classification of River Segment: Scenic

Fifth Water Creek is accessible in some places by road or motorized trail, but is largely primitive and undeveloped. Except for the user created pools at the hot springs, the Fifth Water Trail and Great Western Trail, the Sheep Creek-Rays Valley Road crossing, and a corral and livestock troughs at the end of Fifth Water road, there is no substantial evidence of human activity.

SUITABILITY REPORT

Landownership and Land Uses – The entire 7.8 mile-long river corridor encompasses approximately 2513 acres, and all of this is located on National Forest System (NFS) lands administered by the Uinta National Forest. The 2003 Uinta National Forest Land and Resource Management Plan (Uinta Forest Plan) made the following land allocations for this area:

Uinta Forest Plan Management Allocations				
Management Area	Overlying Management Prescription Allocation		Underlying Management Prescription Allocation	
Diamond Fork	2.2 – Wild and Scenic Rivers – Scenic	2513 acres	5.1 – Forested Ecosystems, Limited Development	886 acres
			6.1 Non-forested Ecosystems	1627 acres

The entire Fifth Water Creek corridor is within the Critical Environmental Zone Planning Area of the Utah County General Plan. The intent and purpose of this zone includes conserving the water resource in a way that will assure a continue supply of pure water in the streams, springs, and wells which sustains the civilization occupying the valley floor of the county; most effectively use the wildlife resources found in the area; and conserve and use the valuable tourism and scenic resources of the county's uplands.

Mineral and Energy Resource Activities – The area around Fifth Water is currently under an oil and gas lease. No Applications for Permits to Drill (APDs) have been filed. This area is considered high potential for oil and gas resources. There are no locatable or salable developments in the vicinity.

Water Resources Development – Lands surrounding Fifth Water Creek are withdrawn or proposed to be withdrawn by the Department of Interior, Central Utah Project for protection of their water infrastructure. There are no historic, current, or known planned Federal Energy Regulatory Commission permits or license applications for this corridor. Designation into the Wild and Scenic river system does not affect existing, valid water rights.

Transportation, Facilities, and Other Developments – The Sheep Creek-Rays Valley Road (#051), a double-lane, paved, arterial Forest road, crosses the stream in about the middle of the segment. The Fifth Water Road (#398), a short (~0.5 mile-long) native-surfaced high clearance Forest road follows Fifth Water Creek from the #051 upstream to an unimproved trailhead. The Diamond Fork Road (#029), a double-lane, paved, arterial Forest road, provides access to the Fifth Water Creek Trailhead located about a mile below the end of this segment and river corridor.

A segment of the Fifth Water Trail (#015), a Forest trail, follows Sixth Water Creek about 1 mile from a trailhead located along the Diamond Fork Road to the downstream end of the corridor at the Sixth Water Creek/Fifth Water Creek confluence. The trail then follows Fifth Water Creek to the hot springs and on upstream to the Sheep Creek-Rays Valley Road crossing parking area. The trail continues in the river corridor for a total of 5.8 miles of trail within the corridor. This trail is a native surface hiking/biking trail and is closed to motorized use.

The Fifth Water Trail (#015) continues upstream from the parking area located at the end of FR 70398 about 1.5 miles to the confluence with the Great Western Trail (#009). This segment of the Fifth Water Trail is open to motorcycles, hikers equestrian, and bikes. The Great Western Trail intersects Fifth Water Creek, crosses and runs adjacent to Fifth Water Creek for about 0.6 miles, then leaves the river corridor. The Great Western Trail is a native surface hiking/biking/ATV/motorcycle trail. The remainder of the Fifth Water Creek Trail is about 2.3 miles in length, and extends from the Great Western Trail to the Strawberry Ridge Road (# 518). This trail is a native surface hiking/biking/motorcycle trail. About 0.8 miles of the Fifth Water Creek Trail is located adjacent to Fifth Water Creek and within the corridor, the remaining upper reach of this trail (~ 1.5 miles) leaves Fifth Water Creek and is outside the river corridor. The Strawberry Ridge Road (#518) is a high clearance Forest road open to ATV use, but is not located within the river corridor.

Grazing Activities – Fifth Water Creek is within the Diamond Fork Allotment. This is a cattle allotment and also has associated livestock fencing and water troughs.

Recreation Activities – The hot springs are a major visitor attraction drawing bathers year around. An estimated 15,000 to 20,000 visitors hike or bike to the hot springs annually, with about 10%-20% coming from outside the region. Trails in the corridor offer hiking, biking, and motorcycle opportunities. The stream cannot support white-water recreation.

Other Resource Activities – Fuels management activities are planned within the corridor above Sheep Creek-Rays Valley Road. A powerline crosses the corridor; utility maintenance is performed. There are no private lands in the corridor, thus no farming.

Special Designations – Fifth Water Creek is within the Strawberry Ridge (#418015) and Diamond Fork (#418016) Inventoried Roadless Areas.

Lands surrounding Fifth Water Creek are withdrawn or proposed to be withdrawn by the Department of Interior, Central Utah Project for protection of their water infrastructure.

Socio-Economic Environment – The entire river segment is located in Utah County, Utah. 2006 Census data indicates the population of Utah County is 464,460, and about 1,389 of these work in the entertainment and recreation industries. Utah County is an urban county, with about 343,000 acres (about 25%) of the 1,370,000-acre county in farms. There are several outfitter and guides that have permits that overlap the corridor.

Current Administration and Funding Needs if Designated – The current administering agency is the USFS.

The following information is based on 2001 data, which doesn't account for inflation over the past six years, but is the best available data. If a river is designated as Wild, Scenic, or Recreational, the actual cost of preparing the comprehensive river management plan would average \$200,000 per plan for 86 segments, which would cost approximately \$17.2 million the first two to three years following designation. It was estimated that annual management costs for a high complexity river would be \$200,000; a moderate complexity river would be \$50,000; and a low complexity river at \$25,000. Using an average of complexity costs, it would cost the Forest Service around \$7.8 million annually for 86 segments. (Estimated Costs of Wild and Scenic Rivers Program - V. 091104)

SUITABILITY FACTOR ASSESSMENT:

(1) The extent to which the State or its political subdivisions might participate in the shared preservation and administration of the river, including costs, should it be proposed for inclusion in the National System.

The entire corridor is located on NFS lands within Utah County, Utah. Utah County supported inclusion of this segment in the NWSRS when it was inventoried, but more recently they commented that the river (i.e., hot pots) has been altered with rocks, plastic sheeting, and piping to control water temperature and question the eligibility of this segment due to this.

The State of Utah has not committed whether they would support preservation and administration of the river segment. Considering this, it is unlikely either the County or State would participate in the shared preservation and administration of the river.

(2) The state/local government's ability to manage and protect the outstandingly remarkable values on non-federal lands. Include any local zoning and/or land use controls that appear to conflict with protection of river values.

Not Applicable, as the entire river corridor encompasses approximately 2,513 acres, and all of this is located on NFS lands administered by the Uinta National Forest. Designation appears to be compatible with the zoning allocation (Critical Environmental Zone) in the 1997 Utah County Plan.

(3) Support or opposition to designation.

Fourteen comment letters were received on the *Draft Inventory of Rivers on the Uinta National Forest Eligible for Inclusion in the national Wild and Scenic Rivers System (1997)*. One of these letters was from Utah County. The Utah County Planner supported the Forest's findings and stated "At this time, I would agree that the four river segments chosen for recommendation as part of the NWSRS findings (North Fork of the Provo River, South Fork of the American Fork River, Fifth Water Creek, and Little Provo Deer Creek) are great examples of scenic and unique river segments in the United States. While human impacts have left little truly "wild" areas within this area of the state, these rivers do reflect the wild and scenic characteristics that, I believe, are the intent of this Federal designation." The State of Utah,

Division of Water Resources, had “no concerns”. The Superintendent of Timpanogos Cave National Monument, National Park Service, commented that “We find the draft’s discussion appropriate and concur with its findings”.

Additionally, three comments were received from the public on the Draft Uinta National Forest Land and Resource Management Plan Environmental Impact Statement. All three were in support of designation of river segments (2003 FEIS, Appendix L).

In the recent state-wide EIS scoping, four comments specific to Fifth Water Creek were received. The Mountainland Association of Governments and Utah County both commented that the river (i.e., hot pots) has been altered with rocks, plastic sheeting, and piping to control water temperature and question the eligibility of this segment due to this. The Central Utah Water Conservancy District commented that during shutdown/drainage of the Syar tunnel (every 5 years) the water is diverted into a holding pond in the 5th Water Creek drainage, which could overflow the pond and travel to 5th Water Creek. They commented that it is important to the operation & maintenance of the tunnel that this ability stays in place. USDI’s Central Utah Project Completion Act Office commented that the proposed Sixth Water power transmission line is planned to cross Fifth Water Creek, that land for the power transmission facilities was withdrawn, and that this may impact the proposed scenic status.

(4) The consistency of designation with other agency plans, programs or policies and in meeting regional objectives.

The entire segment lies on NFS lands managed by the Uinta National Forest, and the entire segment lies within Utah County, Utah. Designation is consistent with the 2003 “Uinta National Forest Land and Resource Management Plan” direction. The corridor is within a grazing allotment and cattle use the corridor to move from one part of the allotment to another. Designation could increase user conflicts between recreation users and cattle grazing, both of which may be appropriate uses under the Forest Plan and with designation as a Scenic River. Designation appears to be compatible with the zoning allocation (Critical Environmental Zone) in the 1997 Utah County Plan. The State of Utah, Division of Water Resources, expressed no concerns with designation of this segment when they commented on the 1997 Draft Inventory.

(5) Contribution to river system or basin integrity.

This 7.8-mile long segment contributes to the basin integrity as it incorporates the entire length of Fifth Water Creek, a tributary of Diamond Fork Creek. The majority of this segment has little development, other than trails which follow the stream. Although the area encompassing the corridor lies within two different forest plan management prescriptions, these prescriptions are similar other than that one pertains to more of a forested environment than the other.

(6) Demonstrated or potential commitment for public volunteers, partnerships, and/or stewardship commitments for management and/or funding of the river segment.

No commitment has been expressed to date. The Spanish Fork Ranger District which manages this river corridor has a long history of considerable volunteerism. It is possible that, given the importance of the hot pots to many users and the history of volunteer service on the District, some volunteers would come forward or could be found to help with management of the trails and/or hot pots and corridor.